

***Remarks***

Reconsideration of this Application is respectfully requested.

Upon entry of the foregoing amendment, claims 1, 2, 6-13, 17-26, and 30-45 are pending in the application, with claims 1, 13, and 25 being the independent claims. Claims 1, 13, and 25 are sought to be amended. Applicant reserves the right to prosecute similar or broader claims, with respect to the amended claims, in the future. New claims 37-45 are sought to be added. These changes are believed to introduce no new matter, and their entry is respectfully requested.

The claims presented in this Application should be interpreted solely based on the file history of this Application, not the file history of any predecessor or related application. With respect to this application, Applicant hereby rescinds any and all disclaimers of claim scope made in any parent application(s), any predecessor application(s), and any related application(s). The Examiner is advised that any previous disclaimer of claim scope, if any, and any references that allegedly caused any previous disclaimer of claim scope, may need to be revisited. Nor should any previous disclaimer of claim scope, if any, in this Application be read back into any predecessor or related application.

Based on the above amendment and the following remarks, Applicant respectfully requests that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

***Rejections under 35 U.S.C. § 103***

Claims 1, 2, 25, and 26

Claims 1, 2, 25, and 26 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over United States Patent Publication No. 2007/0058640 to Bunn et al. (herein "Bunn") in view of United States Patent Publication No. 2002/0136203 to Liva et al. (herein "Liva"). Applicant respectfully traverses the rejection and provides the following arguments to support patentability.

This Application discloses establishing of logical upstream channels to support future communication between a cable modem termination system (CMTS) and cable modems that implement one or more proprietary features. (Specification, ¶ [0047] - [0063].) These one or more proprietary features are not provided for, or permitted by, DOCSIS. (Specification, ¶ [0041].) More specifically, the CMTS communicates with a cable modem to determine whether the cable modem supports proprietary features. (Specification, ¶ [0052].) If the cable modem supports proprietary features, then the CMTS gathers a list of the proprietary features from the cable modem. (Specification, ¶¶ [0052] - [0053].) The CMTS then uses the list to determine if the cable modem can be placed in an existing logical channel that supports the proprietary features. (Specification, ¶ [0054].) If the cable modem cannot be placed into the existing logical channel, the CMTS evaluates all the currently registered cable modems, including the cable modem and other cable modems supporting the proprietary feature, that support the proprietary features and determines if a new proprietary logical channel should be created for all the currently registered cable modems that support the proprietary features. (Specification, ¶ [0054].) The CMTS then creates the new proprietary logical

channel when a number of the currently registered cable modems that support the proprietary features and that have not been placed into the existing logical channel ("unplaced cable modems") reaches a predetermined number. (Specification, ¶ [0054].) If the number of unplaced cable modems has not reached the predetermined number, indicating that a new proprietary logical channel should not be created, the CMTS then assigns the cable modem to a standard DOCSIS channel. (Specification, ¶ [0055].)

A. The Office Action fails to allege that Liva teaches or suggests at least the feature of "creating a new proprietary logical channel when a predetermined number of currently registered devices support said at least one proprietary communication parameter" as recited by independent claim 1.

Independent claim 1 recites at least the feature of "*creating a new proprietary logical channel when a **predetermined number** of currently registered devices support said at least one proprietary communication parameter.*" The Office Action correctly acknowledges that Bunn does not specifically disclose this aforementioned feature of independent claim 1. (Office Action, p. 6.) However, the Office Action fails to allege that Liva teaches or suggests this aforementioned feature of independent claim 1. As a result, the Office Action has failed to make out a *prima facie* case of obviousness with respect to independent claim 1 based on the combination of Bunn and Liva. However, to expedite prosecution of this Application, Liva does not teach or suggest this aforementioned feature of independent claim 1.

Liva

Liva discloses logically assigning channels from any of four selectable upstream channels for specific services or functions, such as migration between different revisions of cable modem standards. (Liva, ¶¶ [0153]-[0154].) Nowhere does Liva teach or

suggest at least the feature of "*creating a new proprietary logical channel when a predetermined number of currently registered devices support said at least one proprietary communication parameter*" as recited by independent claim 1. This feature of independent claim 1 does not create a new proprietary logical channel for specific services or functions as disclosed by Liva, rather this feature of independent claim 1 only creates the new proprietary logical channel after a number of currently registered devices that support the proprietary features reaches a predetermined number. In other words, the method of independent claim 1 does not create the new proprietary logical channel for specific services or functions, rather the method of independent claim 1 creates the new proprietary logical channel when a predetermined number of currently registered devices, each having that specific service or function, requires a new proprietary logical channel.

B. Bunn is not prior art against this Application under the exception of 35 U.S.C. § 103(c)

Further, according to 35 U.S.C. § 103(c), subject matter which qualifies as prior art under 35 U.S.C. § 102(e) does not preclude patentability under 35 U.S.C. § 103 if it is shown to be owned by the same person or subject to an obligation of assignment to the same person as the claimed invention at the time the invention was made. The invention(s) claimed in this Application and Bunn were, at the time the claimed invention(s) disclosed in this Application were made, owned by or subject to an obligation of assignment to a common Assignee, Broadcom Corporation. For the convenience of the Examiner, Applicant has provided a copy of the Patent Assignment Abstract of Title for Bunn as Appendix A and a copy of the Patent Assignment Abstract

of Title for this Application as Appendix B. Therefore, Bunn is not prior art against this Application under the exception of 35 U.S.C. § 103(c).

In summary, the Office Action has failed to make out a *prima facie* case of obviousness with respect to independent claim 1 based on the combination of Bunn and Liva for the following reasons:

1. Bunn is not prior art against this Application under the exception of 35 U.S.C. § 103(c); and
2. The Office Action fails to allege that Liva teaches or suggests at least the feature of "*creating a new proprietary logical channel when a predetermined number of currently registered devices support said at least one proprietary communication parameter*" as recited by independent claim 1.

Independent claim 25 recites substantially similar features as independent claim 1. The Office Action has likewise failed to make out a *prima facie* case of obviousness with respect to independent claim 25. Dependent claims 2 and 26 are likewise not rendered obvious by the combination of Bunn and Liva for the same reasons as the independent claims from which they respectively depend and further in view of their own respective features. Accordingly, Applicant respectfully requests that the rejection of claims 1, 2, 25, and 26 under 35 U.S.C. § 103(a) be reconsidered and withdrawn.

Claims 6-13, 17-24, and 30-36

Claims 6-13, 17-24, and 30-36 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Bunn in view of Liva and in further view of one or more of the following:

United States Publication Patent No. 2005/0025145 to Rakib et al. (herein "Rakib");

Reply to Office Action of August 21, 2009

United States Publication Patent No. 2007/0076717 to Limb et al. (herein "Limb"); and

United States Publication Patent No. 2004/000863 to Cloonan et al. (herein "Cloonan").

Applicant respectfully traverses the rejection and provides the following arguments to support patentability.

From the discussion above, the Office Action has failed to make out a *prima facie* case of obviousness with respect to independent claim 1 based on the combination of Bunn and Liva for the following reasons:

1. Bunn is not prior art against this Application under the exception of 35 U.S.C. § 103(c); and
2. The Office Action fails to allege that Liva teaches or suggests at least the feature of "*creating a new proprietary logical channel when a **predetermined number** of currently registered devices support said at least one proprietary communication parameter*" as recited by independent claim 1.

Independent claim 13 recites substantially similar features as independent claim 1. The Office Action has likewise failed to make out a *prima facie* case of obviousness with respect to independent claim 13. Rakib, Limb, or Cloonan alone, or any combination thereof, does not provide the missing teachings or suggestions with respect to claim 25 nor does the Office Action so allege. Therefore, the combination of Bunn, Liva, and one or more of Rakib, Limb, and Cloonan does not render independent claim 13 obvious. Dependent claims 17-24 are likewise not rendered obvious by the combination of Bunn, Liva, and one or more of Rakib, Limb, and Cloonan for the same reasons as the independent claims from which they respectively depend and further in view of their own respective features.

From the discussion above, independent claims 1 and 25 are in condition for allowance. Dependent claims 6-12 and 30-36 are likewise in condition for allowance for the same reasons as the independent claims from which they respectively depend and further in view of their own respective features. Accordingly, Applicant respectfully requests that the rejection of claims 6-12 and 30-36 under 35 U.S.C. § 103(a) be reconsidered and withdrawn.

***New Claims***

Claims 37-45

New claims 37-45 have been added. From the discussion above, Applicant has traversed the rejections to independent claims 1, 13, and 25. Dependent claims 37-45 are likewise allowable for the same reasons as the independent claims from which they respectively depend and further in view of their own respective features.

***Conclusion***

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicant believes that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

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Date: 02/19/10

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Reply to Office Action of August 21, 2009

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Appl. No. 10/682,536

***Appendix A: Copy of Patent Assignment Abstract of Title for  
United States Patent Publication No. 2007/0058640 to Bunn et al.***



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#### Total Assignments: 1

**Patent #:** 7428247      **Issue Dt:** 09/23/2008      **Application #:** 11521348      **Filing Dt:** 09/15/2006  
**Publication #:** 20070058640      **Pub Dt:** 03/15/2007  
**Inventors:** Fred A. Bunn, Thomas L. Johnson, Joel Danzig  
**Title:** METHODS FOR HEADER SUPPRESSION IN A NETWORK THAT GUARANTEES IN ORDER DELIVERY OF PACKETS

#### Assignment: 1

**Reel/Frame:** 018318/0211      **Recorded:** 09/15/2006      **Pages:** 13

**Conveyance:** ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS).

**Assignors:** BUNN, FRED A.      **Exec Dt:** 01/08/2002  
JOHNSON, THOMAS L.      **Exec Dt:** 01/07/2002  
DANZIG, JOEL      **Exec Dt:** 02/25/2002

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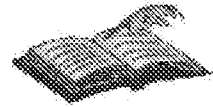
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***Appendix B: Copy of Patent Assignment Abstract of Title for this  
Application***



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### Patent Assignment Abstract of Title

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#### Total Assignments: 1

**Patent #:** NONE

**Issue Dt:**

**Application #:** 10682536

**Filing Dt:** 10/10/2003

**Publication #:** 20050078699

**Pub Dt:** 04/14/2005

**Inventor:** Scott A. Cummings

**Title:** System, method, and computer program product for utilizing proprietary communication parameters to improve channel efficiency in a DOCSIS-compliant broadband communication system

#### Assignment: 1

**Reel/Frame:** 014592/0417

**Recorded:** 10/10/2003

**Pages:** 3

**Conveyance:** ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS).

**Assignor:** CUMMINGS, SCOTT A.

**Exec Dt:** 10/07/2003

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